

REMARKS

I. PRELIMINARY REMARKS

Claims 33, 35 and 36 have been amended. Claim 34 has been canceled. Claims 41-46 have been added. Claims 13, 16, 17, 19, 20, 28, 30, 32, 33, 35, 36 and 38-46 remain in the application. Reexamination and reconsideration of the application, as amended, are respectfully requested.

Applicant filed an Information Disclosure Statement ("IDS") on May 19, 1999. A copy of the IDS, including the PTO form 1449 and date stamped postcard receipt, is attached hereto as Exhibit 1. The Office Action does not include any indication that the IDS has been considered. Accordingly, applicant hereby requests that the Examiner consider the IDS, initial the PTO form 1449 and return it to applicant with the next Office Action.

II. BRIEF DESCRIPTION OF THE ILLUSTRATED EMBODIMENTS

The present invention, as defined by the claims, is directed generally to a system for ablating tissue. As shown by way of example in FIGS. 59 and 60, a system 298 in accordance with one embodiment of the invention includes a controller 300 and a probe 180 that may be inserted into the body. The probe includes an ablation element 176(1) which, in the exemplary embodiment, consists of a plurality of conductive regions E1 to E7 that form an energy emitting region 192. The exemplary controller 300 can be used to selectively switch the operation of the electrodes between unipolar and bipolar ablation modes. The controller 300 also includes a plurality of manually operable switches T1 to T7 that can be used to selectively block transmission to some or all of the respective conductive regions E1 to E7 to form a variety of lesion patterns and lengths. [See the specification from, for example, page 53, line 31 to page 58, line 17

and FIGS. 59-66.] Some of these lesion patterns are formed when two conductive regions are separated by a non-conductive region. [See FIGS. 33-35.]

III. PRIOR ART REJECTIONS

A. The Rejections

Claims 13, 16, 19, 20, 28, 30, 33-36, 38 and 39 have been rejected under 35 U.S.C. § 102 as being anticipated by the Eggers '443 patent.¹ Claims 17, 32 and 40 have been rejected under 35 U.S.C. § 103 as being unpatentable over the combined teachings of the Eggers and Imran patents.² The rejections under 35 U.S.C. §§ 102 and 103 are respectfully traversed with respect to the claims as amended above. Reconsideration thereof is respectfully requested.

B. The Claimed Inventions

Independent claim 13 calls for a combination of elements including, *inter alia*, an energy transmitting region and control means for electronically coupling the region to a source of tissue ablating energy, selectively electronically altering the energy transmitting characteristics of the region to **block transmission** from portion of the

¹ Applicant notes that there is no Eggers et al. '443 patent of record in the present application and that the Office Action did not include a form PTO 892 or a copy of the patent. Applicant assumes that the Office Action is referring to U.S. Patent No. 5,366,443. Should this assumption be incorrect, applicant respectfully requests that the rejection be clarified in a supplemental, non-final Office Action.

² Applicant notes that there are presently eight (8) Imran patents of record in the present application and that the Office Action does not specify which one of the Imran patents has been applied. As such, applicant assumes for the purposes of this response that the Office Action refers to the Imran patent that was applied in the previous Office Action – U.S. Patent No. 5,156,151. Should this assumption be incorrect, applicant respectfully requests that the rejection be clarified in a supplemental, non-final Office Action.

region while allowing transmission from another portion of the region **in response to a first input command**, and electronically varying the length of the region where transmission is allowed between a first non-zero length and a second non-zero length in response to a second input command.

Independent claim 28 calls for a combination of elements including, *inter alia*, a plurality of longitudinally spaced electrodes and a controller operably connected to the plurality of electrodes and to a source of tissue ablating energy ... the controller including switching means for selectively **disconnecting** at least one of the electrodes within the plurality of longitudinally spaced electrodes from the source of tissue ablating energy **in response to a first predetermined input command** such that two electrodes are electrically connected to the source of tissue ablating energy and the at least one disconnected electrode is between the two connected electrodes.

Independent claim 33 calls for a combination of elements including, *inter alia*, at least first, second and third contiguous electrodes, and a control device operable in a first mode in response to a first input command to simultaneously electronically couple the first, second and third electrodes to a source of tissue ablation energy such that the first, second and third electrodes simultaneously transmit ablation energy, and operable in a second mode **in response to a second input command to block transmission** from one of the first, second and third electrodes while simultaneously electronically coupling the other of the first, second and third electrodes to a source of tissue ablation energy such that the other of the first, second and third electrodes simultaneously transmit ablation energy.

C. Discussion

The Eggers patent is directed to a system that may be used to selectively heat stenotic material within a blood vessel while limiting the amount of heat applied to blood and the blood vessel wall. [Column 4, lines 49-54.] The system includes a catheter 10 with an array of isolated electrodes 18 disposed on the catheter tip 12. The electrodes 18

are connected to a power source 32 which reduces or blocks power to the electrodes in certain circumstances. In contrast to the presently claimed inventions, however, the Eggers power source 32 does not block transmission from (or disconnect power to) certain electrodes in response to an input command. Quite to the contrary, the power source 32 **automatically** reduces or blocks power to the electrodes 18 that are transmitting power through a relatively low resistance path (i.e. blood or blood vessel wall) in order to focus the energy through a relatively high resistance path (i.e. stenotic material). [Column 3, lines 18-28 and column 6, line 57 to column 7, line 17.]

As the Eggers patent fails to teach or suggest each and every element of the inventions defined by independent claims 13, 28 and 33, applicant respectfully submits that the rejection of claims 13, 16, 19, 20, 28, 30, 33-36, 38 and 39 under 35 U.S.C. § 102 should be withdrawn.

Turning to the rejection under 35 U.S.C. § 103, the Imran patent fails to remedy the above identified deficiencies in the Eggers patent with respect to independent claims 13, 28 and 33. Applicant respectfully submits, therefore, that claims 17, 32 and 40 are patentable over the combined teachings of the Eggers and Imran patents and that the rejection under 35 U.S.C. § 103 should be withdrawn.

IV. CLOSING REMARKS

In view of the foregoing, it is respectfully submitted that the claims in the application patentably distinguish over the cited and applied references and are in condition for allowance. Reexamination and reconsideration of the application, as amended, are respectfully requested. Allowance of the claims at an early date is courteously solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is respectfully requested to call Applicant's undersigned representative at (310) 563-1458 to discuss the steps necessary for placing the application in condition for allowance.

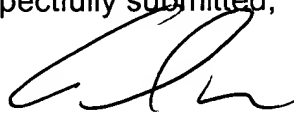


The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-0638. Should such fees be associated with an extension of time, applicant respectfully requests that this paper be considered a petition therefor.

11/30/99
Date

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Respectfully submitted,



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